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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/544,898	04/07/2000	George H. Peden	004698.P002	2445

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EXAMINER

NAJJAR, SALEH

ART UNIT PAPER NUMBER

2157

DATE MAILED: 08/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/544,898	PEDEN ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Saleh Najjar	2157	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 26 May 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-8 and 10-47 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 10-47 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

Art Unit: 2157

1. This action is responsive to the preliminary amendment filed on May 26, 2004. Claims 7, 29, and 30 were amended. Claims 31-48 were newly added. Claims 1-8, and 10-47 are pending.

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-6, 29, and 31-33 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1-6, 29, and 31-33 recite the limitation of determining if the client is authorized to receive the key, then transmitting the ticket if the client is authorized. It is unclear what qualifies the client for the key.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-3, 5-8, 10, 13, 16-23, 26, 29, 32-33, 35, 38, and 42-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Akins, III et al., U.S. Patent No. 6,744,892.

Akins teaches the invention substantially as claimed including a method and apparatus for geographically limiting service in a conditional access system (see abstract).

As to claim 1, Akins teaches a method for accessing a broadcast event comprising:

receiving a request for a ticket at a ticket server, said request being from a receiving client, wherein the receiving client is to participate in the broadcast event transmitted by a sending client, receipt of said ticket to qualify the receiving client to access a key from a key server, wherein the key is a symmetric key that the sending client uses to encrypt the broadcast event and the receiving client uses to decrypt the broadcast event, said key to facilitate access to the broadcast event by at least one receiving client (see figs. 1-4; col. 4, lines 35-40; col. 5, lines 1-20; col. 22, lines 30-40, Akins discloses that the client requests and receives a entitlement control message ECM 107 which authorizes the client to receive entitlement control messages that includes key data required for decrypting broadcast events);

determining if the receiving client is authorized to receive the key (see col. 5, lines 1-20, Akins discloses that the client requests and receives a entitlement control message ECM 107 which authorizes the client to receive entitlement control messages that includes key data required for decrypting broadcast events) ; and

transmitting the ticket from the ticket server to the receiving client if the receiving client is authorized (see col. 4, lines 30-40, Akins discloses that the client is provided with entitlement control message for accessing a particular broadcast event).

Akins fails to teach the claimed limitation of a multicast event. Akins does teach that events are broadcasted (see col. 6, lines 1-10).

"Official Notice" is taken that the concept and advantages of using multicasting is old and well known in the art.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Akins by specifying multicasting. One would be motivated to do so to allow transmission of data to a subset of the broadcast group.

As to claim 2, Akins teaches the method of claim 1, wherein determining if the receiving client is authorized comprises:

accessing a database that defines authorized clients, and determining if the receiving client is among the authorized clients defined by the database (see col. 14, lines 45-65; col. 22, lines 30-40, Akins discloses that a database of authorized clients is maintained by the authorization server).

As to claim 3, Akins teaches the method of claim 1 further comprising:

accessing a database that defines associations between authorized clients and broadcast events, constructing a summary of all broadcast events to which the receiving client is associated based on the database, and including the summary in the ticket (see col. 22, lines 30-60; col. 23; col. 27, lines 1-10).

As to claim 5, Akins teaches the method of claim 1 wherein the ticket comprises at least one of an identifier that indicates a group to which the receiving client belongs, a list identifying at least one multicast event for which the receiving client is qualified, and a digital certificate that indicates that the receiving client is authorized for each listed multicast event ticket (see col. 22, lines 30-60; col. 23; col. 27, lines 1-10).

As to claim 6, Akins teaches the method of claim 5 wherein the list comprises at least one of a title of each listed event, an internet protocol (IP) address for each listed event, a time indication for each listed event, and an IP address for a key server corresponding to each listed multicast event (see col. 4-5; col. 22, lines 30-60; col. 23; col. 27, lines 1-10).

As to claim 7, Akins teaches a method comprising:

receiving a request for a key at a key server, said request being received from a receiving client, said key to facilitate access to a broadcast event by the

Art Unit: 2157

receiving client, wherein the key is a symmetric key that the sending client uses to encrypt the broadcast event and the receiving client uses to decrypt the broadcast event (see figs. 1-4; col. 4, lines 35-40; col. 5, lines 1-20; col. 22, lines 30-40, Akins discloses that the client requests and receives an entitlement control message ECM 107 which authorizes the client to receive entitlement control messages that includes key data required for decrypting broadcast events);

determining if the receiving client is qualified to receive the key based on a ticket previously obtained by the receiving client from a ticket server; and transmitting the key from the key server to the receiving client if the receiving client is qualified (see col. 4, lines 30-40, Akins discloses that the client is provided with entitlement control message for accessing a particular broadcast event).

Akins fails to teach the claimed limitation of a multicast event. Akins does teach that events are broadcasted (see col. 6, lines 1-10).

"Official Notice" is taken that the concept and advantages of using multicasting is old and well known in the art.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Akins by specifying multicasting. One would be motivated to do so to allow transmission of data to a subset of the broadcast group.

As to claim 8, Akins teaches the method of claim 7, wherein the key comprises at least one of an initiation time for use of the key and a lifetime for the key (see col. 6, lines 40-45).

As to claim 10, Akins teaches the method of claim 7, wherein the request comprises an initial request for the event, and wherein receiving the initial request comprises:

receiving the initial request at a particular time during a predetermined period before the multicast event, said particular time being randomly generated by the receiving or sending client (see col. 5, lines 1-10; col. 6, lines 40-65).

As to claim 13, Akins the method of claim 7 wherein the key corresponds to a first interval of the broadcast event, and wherein the method further comprises:

determining if the receiving client remains qualified to receive a refresh key; and transmitting the refresh key to the receiving client if the receiving client remains qualified, said refresh key corresponding to the subsequent interval of the broadcast event (see col. 8, lines 55-65, Akins discloses that EMMs containing key data are sent repeatedly for different interval of the program).

As to claim 13, Akins teaches the method of claim 7 wherein the key corresponds to a first interval of the multicast event, and wherein the method further comprises:

determining if the receiving client remains qualified to receive a refresh key; and transmitting the refresh key to the receiving client if the receiving client remains qualified, said refresh key corresponding to the subsequent interval of the multicast event (see col. 8, lines 55-65, Akins discloses that EMMs containing key data are sent repeatedly for different interval of the program).

As to claim 16, Akins teaches the method of claim 7 wherein the key server has a synchronized time with respect to a sending client for the event to within a margin of error, and wherein the method further comprises:

determining which of a plurality of available keys to use for said key based on the synchronized time (see col. 8, lines 40-65; col. 9, lines 1-40).

As to claims 17-18, Akins teaches the method of claim 7 wherein determining comprises at least one of:

verifying that the request is received within a predetermined period before the multicast event or time interval during the multicast event; and verifying that the request includes credentials for the multicast event or wherein the request is received within a predetermined time frame after the multicast event starts,



wherein said multicast event is not encrypted during the predetermined time (see col. 6, lines 11-20; col. 8, lines 40-65; col. 22, lines 30-65).

Claims 19-23, 26, 29, 32-33, 35, 38, and 42-47 do not teach or define any new limitations above claims 1-3, 5-8, 10, 13, 16-18 and therefore are rejected for similar reasons.

5. Claims 11-12, 14-15, 24-25, 27-28, 34, 36-37, 39-41, and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Akins, III et al., U.S. Patent No. 6,744,892 in view of Schmeidler et al., U.S. Patent No. 6,763,370.

Akins teaches the invention substantially as claimed including a method and apparatus for geographically limiting service in a conditional access system (see abstract).

As to claim 11, Akins teaches the method of claim 7.

Akins fails to teach the limitation of establishing a secure point-to-point link between the key services and the receiving client in response to the requests, wherein the key is transmitted over the secure point-to-point link.

However, Schmeidler teaches a system and method for content protection in a content delivery system (see abstract). Schmeidler teaches establishing a secure point-to-point link between the key services and the receiving client in response to the requests, wherein the key is transmitted over the secure point-to-point link (see col. 14, lines 1-60, Akins discloses that a token having key data is requested repeatedly by the client launcher and that a secure point to point link is established for receiving the tokens containing key data value).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Akins by establishing a secure point to point link for requesting and receiving key data values. One would be motivated to do so to provide high bandwidth and security in delivering data over the network.

As to claim 12, Akins teaches the method of claim 7.

Akins fails to teach the limitation wherein the request comprises one of a plurality of refresh requests, wherein each of the plurality of refresh requests corresponds to one of a plurality of forward security windows during broadcast event, wherein each of the plurality of forward security windows comprises a repeated time interval, and wherein receiving the refresh request comprises receiving the refresh request at a particular time within a corresponding forward security window, said particular time being randomly generated by the receiving or sending client for a first forward security window and applied at the repeated time interval thereafter. Akins does teach that entitlement management messages EMMs containing different key values are repeatedly sent to the client during a forwarding window established by the sender (see col. 8, lines 55-65).

However, Schmeidler teaches a system and method for content protection in a content delivery system (see abstract). Schmeidler teaches receiving the refresh request at a particular time within a corresponding forward security window, said particular time being randomly generated by the receiving or sending client for a first forward security window and applied at the repeated time interval thereafter (see col. 9, lines 20-60; col. 10, lines 1-50; col. 13-14, Akins discloses that a token having key data is requested repeatedly by the client launcher and that a secure point to point link is established for receiving the tokens containing different key values for different forwarding windows ).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Akins by requesting and receiving key data values at forwarding windows dictated by the sending or receiving client. One would be motivated to do so to provide security in delivering data over the network using different key values.

Claims 14-15, 24-25, 27-28, 34, 36-37, 39-41, and 48 do not teach or define any new limitations above claims 11-12 and therefore are rejected for similar reasons.

Art Unit: 2157

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Saleh Najjar whose telephone number is (703) 308-7613. The examiner can normally be reached on Monday-Friday from 6:30 to 3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, *Ario Etienne*, can be reached on (703) 308-7562. The fax phone number for this Group is (703) 308-9052.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-9600. The fax number for the After-Final correspondence/amendment is (703) 746-7238. The fax number for official correspondence/amendment is (703) 746-7239. The fax number for Non-official draft correspondence/amendment is (703) 746-7240.



Saleh Najjar

Primary Examiner / Art Unit 2157